

Dave Asprey:

Come and join me and five of the world's leading personal development teachers at the new Bulletproof personal development event, Be Unlimited. This is unlike anything else out there. Learn from me, learn from holotropic breathwork creator and non-ordinary states of consciousness expert, Doctor Stan Groff. Learn to meditate with Zen master Genpo Roshi. Get an energy upgrade from the master of the Emperor's Energy, Doctor Barry Marguelan. Enroll by August 3 and save \$500. Be Unlimited Takes place in San Francisco, August 10-13. If you can't make those dates, it's not a problem...there's another one happening January 18-21 in 2018. Go to BulletproofTrainingInstitute.com for more information. That's BulletproofTrainingInstitute.com. I really hope to see you there. This is one of those world-changing things I'm so excited to be doing.

One of the first things I had to do after developing the Bulletproof diet, and shedding some of this extra fat, and putting on a bunch of muscle in different places was shop for new clothing. It's a frustrating experience, because finding a dress shirt that fits correctly never seems to work right. Collars are too tight, the sleeves are too long or too short, something's always not right. Luckily, I stumbled on ProperCloth.com. ProperCloth.com is a website where you can easily create a custom shirt size in seconds by answering just 10 easy questions. You don't need a measuring tape so it's a foolproof process. I probably don't own a measuring tape. [Proper Cloth](http://ProperCloth.com) has over 500 fabric styles to choose from, classic business and casual styles. [Proper Cloth](http://ProperCloth.com) custom shirts start from 85 bucks. They're made from premium Italian and Japanese fabrics. The website's easy to use, your custom sizes and your preferences are all saved to your profile, and you could even order it on your phone. [Proper Cloth](http://ProperCloth.com) guarantees a perfect fit for all their shirts. If there are any problems with the way your shirt fits, ProperCloth.com will remake it for free. Stop wearing shirts that don't fit, start looking your best. Go to [Proper Cloth.com/Bulletproof](http://ProperCloth.com/Bulletproof) today. Enter gift code [Bulletproof](http://ProperCloth.com/Bulletproof) to save \$20 on your first shirt. Do it today.

Speaker 2:

[Bulletproof Radio](http://BulletproofRadio.com), a state of high performance.

Dave Asprey:

Your listening to [Bulletproof Radio](http://BulletproofRadio.com) with Dave Asprey. Today's cool fact of the day is that joint pain is not anything new, but did you know it might have played a role in the American Revolution? Hippocrates called gout, arthritis of the rich, because of lifestyle factors that came in, like drinking lots of excessive alcohol, and, quote, rich food. If you were diagnosed with the gout, it actually was cool. From a social perspective. People with gout were successful. One of those well-to-do gout sufferers was a British statesman called William Pitt, the elder, who happened to be absent from Parliament because of a gout attack on the day the British government decided to levy those taxes on tea imports that led to the Boston tea party. It wasn't for our old friend, gout, there might not have been an American revolution. Who would have thought?

I've heard that a lot of people in the bio hacking community, just people want to take care of himself have had trouble with how much they overpay for life insurance, because life insurance companies haven't caught up with all the new

science that changes the way different types of food and exercise, diets, are viewed by the scientific community. Life insurance companies are still telling you to eat fat-free toast, and crap like that. For example, if you're committed to the Bulletproof diet, you might have an increased level of good cholesterol called HDL, that's protective. Some life insurance companies are going to lump all cholesterol into one negative category based on science that's actually been rejected by the American Heart Association, but the life insurance company still do it. That decision can increase what you pay for life insurance.

If you're listening to this podcast, you care about your health. A company called Health IQ advocates for health-conscious lifestyles, and they think you should actually be rewarded for it. They use science and data to get you lower rates on insurance from the health companies, things for people who are health-conscious. Cyclists, runners, even vegans and vegetarians, weightlifters, are on Bulletproof. In fact, research has shown that people with a high health IQ are 42 percent less likely to be obese and a 57% percent lower risk of early death. They get to go to the hospital less. A lot of people don't know their health IQ, and they don't know that their health IQ can save them money on life insurance. It's worth checking it out.

Right now, Bulletproof Radio listeners can learn more and get a free life insurance quote by going to HealthIQ.com/Bulletproof. That's HealthIQ.com/Bulletproof to learn your health IQ, and to learn more about life insurance for people who pay attention to their health.

Today's guest is a remarkable guy...**DAVE READS A LIST OF DR. STEVEN GUNDRY'S CREDITS...**

In 2016, he launched a wellness blog and a YouTube channel to help people learn about this stuff, and just wrote a new book that came out in April and hit the Wall Street Journal, USA Today and New York Times bestseller lists. The book is called "The Plant Paradox", and the author is none other than Doctor Steven Gundry. Welcome to Bulletproof Radio.

Steven Gundry:

Hey, thanks for having me. I am really excited to be here.

Dave Asprey:

You wrote "The Plant Paradox". When I first saw this coming out, I was excited because, well, you have I would call, unimpeachable credentials, as in you been doing this for at least a couple weeks. And, your book is all about how plants protect themselves from being eaten. Which is something that's missing from a lot of this nutritional dogma that's out there, and some of the thinking behind the Bulletproof diet is that there is a list of suspect foods. One of the [00:05:30] big things that makes things like garbanzo beans, and bell peppers, and pretty much all grains a suspect is the defense mechanisms that are present in these things. Just out of the blue, your book comes out after you've been researching this stuff for 10 years with some profound stories, and really good research that says, look, these plant compounds are not doing us favors, and here's how to

tell the difference. What led you down this path of looking at plant toxins, versus all the things you could've done, you're like an artificial heart guy?

Steven Gundry: Well, about 17 years ago, my arch in life was changed. Very much like yours was. I was a very famous professor and chairman of heart surgery at [inaudible] University, and a guy from Miami, who I called Big Ed was sent to me with inoperable coronary artery disease. All of his blood vessels were clogged up, you couldn't put stints in them, you couldn't do bypasses. He'd been going around the country to surgeons who take this sort of thing on, and I'm one of those. He finally got to me, and he'd been going around the country for about six months. Now, this is a very obese guy. When I met him, he weighed 265 pounds.

I'm looking at his corner, Andrew Graham, the movie of his heart, and I'm going, "You know, I'm really not going to help you. I agree with everybody else, there's just nothing we're going to do." He says, "Well, look, I've been at this for six months, I've gone on a diet, I've lost 45 pounds, and I went to a health food store, and I bought this big bag of supplements, and been taking these supplements every day. Maybe I did something in here." I'm looking at him going, "Well, good for you for losing 45 pounds, but it's not going to change anything here. I know what you did with all those supplements, you made expensive urine." Which I actually believed back then.

Dave Asprey: I'm totally okay with having expensive urine. It means my body used what I wanted, and I peed the rest out. My [inaudible] have the most expensive urine on the planet, and Godspeed.

Steven Gundry: Yeah, exactly. I'm trying to catch [inaudible] with the expensive urine.

Dave Asprey: I think I'm there, you are too?

Steven Gundry: Yeah. Yeah, 120 different ones in the morning and night, but we can go into that later.

Dave Asprey: Oh, good, good, good.

Steven Gundry: Anyhow, this guy, we got another angiogram on him, and I was so impressed that I actually operated on him. If I had known what I know now, I would have said, "Hey, great going, let's clean the rest out. I wasn't, I was stupid back then. After we were done, I said, "Hey, tell me about this diet. Let me look at those supplements." He starts describing the diet, and a few sentences in I go, "Wait a minute, timeout." I had a special major at Yale University back in the dark ages where I had a major for four years where my thesis was you could alter a great ape's food supply, and alter his environment, and you could prove that you would arrive at a human being.

That was my thesis, which I defended successfully, and got an honors, and then tucked it away in my parent's home. Went on to do hard surgery. He's starting

to describe this diet, and I'm going, "Wait, that's my thesis." This is rather poignant, because like you, I was a very obese individual. I weighed 230 pounds, I'm 510, I was running 30 miles a week, going to the gym one hour every day, and eating a healthy, low-fat, adventive diet.

Dave Asprey: Excuse me Doctor Gundry, you're obviously lying. You're sneaking Snickers bars all the time. If you were doing that, you would have lost weight. Did your colleagues tell you that?

Steven Gundry: Yeah.

Dave Asprey: I love this.

Steven Gundry: I could go on any diet known to mankind, the Atkins diet, I could lose 20 pounds, and then gain 25. The Ornish diet, I could lose 20 pounds and gain 25. The cabbage soup diet. The egg diet. I had high cholesterol, and prediabetes, and I had such bad arthritis that I actually had to wear braces on my knees to keep running. I got migraine headaches every day, imagine doing baby heart transplants with migraines, it's not a lot of fun. I was told that this was genetic, because my father was almost identical in all his lab works, and about the same size, and there was really nothing I could do about it.

I called my parents when I listened to big Ed, and they sent my thesis up to me. I got it actually up here in the shelf, and I put myself on my thesis. I looked in his bag of supplements, and I was using a bunch of these supplements, intravenously, down in the lab to resuscitate hearts that had been dead for an hour, and then putting them in a bag of ice water for 48 hours. It had never occurred to me to swallow the dumb things.

Dave Asprey: Like carnitine, and things like that?

Steven Gundry: Yeah, like carnitine, like actually grape seed extract, lipoic acid, like pycnogenol, Pro enzyme Q10. I started taking a bunch of supplements. I started sending my blood work-

Dave Asprey: Let me pause you for a second there.

Steven Gundry: Yeah.

Dave Asprey: How long ago was this?

Steven Gundry: This was 1997.

Dave Asprey: It takes a lot of balls for former president American heart Association to take one supplement, and you started taking all these things. That's almost [inaudible] to your profession at the time. What made you do that?

Steven Gundry: Well, you and I know that our ancient ancestors interact with 250 different plant species on a rotating basis. All of those plants have polyphenols, flavonoids that not only turn on our individual genes, but more importantly, they alter the gene expression of our microbiome. We would encounter these things on a seasonal basis. One of the things I keep telling even my hard-core organic food eaters is look, if you think visiting a farmer's market every day of your life that you are going to require 250 different plant species on a rotating basis, I've got oceanfront property in Palm Springs to sell you. It just can't be done. What I decided to do was turn, not only myself, but my patients into an ongoing research project. Because at my core, that's what I do is research. I started doing this on myself, and I lost 50 pounds the first year, and I did that on purpose, and then I subsequently lost another 20 pounds, and I've kept it off now for 20 years. I gave up long distance running, that was one of the stupidest things that anybody could ever do.

Dave Asprey: You're making me happy, man.

Steven Gundry: Just ask Mark Sisson, his opinion of long distance running now.

Dave Asprey: I have, right.

Steven Gundry: Yeah. Anyhow, I started doing this on patients that I operated on, because at that time, I still thought, "Well, I'll just put in some new plumbing, but let's keep the plumbing from clogging up" because I was famous for doing redo operations, and redo redo operations. That just gets silly. Our profession is convinced that this is an ongoing process, maybe we can slow it down a little bit, but it'll finally get you. Of course, that's all wrong. I set up an Institute in Palm Springs where I ask anybody who wanted to play with me that every three months we'd send their bloodwork up to the Bay Area, to Virginia, down to Texas, wherever I could find an interesting lab that could give me, what are called, inflammatory cytokines.

Then we started tweaking foods. We started tweaking supplements. Very rapidly after the publication of my first book in 2008, which was Doctor Gundry's diet of illusion, a ton of people with autoimmune diseases started coming to my office. They'd say, "Well, what do you know about autoimmune disease?" I'd go, "I don't know anything about autoimmune disease, but I know a whole lot about the immune system, because I'm a transplant immunologist. I'm famous for having the longest pig to baboon heart transplant survival. 30 days, baboon with a pig heart. The previous record was five hours. That's good. We looked at immune markers, and lo and behold, these set of plans came right up on the top of the list. For instance, our favorites, the grains and the beans appeared really very quickly.

As you know, because my research at Yale was human evolutionary biology, we never ate a grain or a bean until about 10,000 years ago. When agriculture got started. Now, the interesting thing most people don't know that we were very tall creatures 10,000 years ago. We stood about six feet tall. The shocking thing

is, our brain size was about 15 percent bigger than it is today. Everybody goes, "No, no, no, no, we were little creatures, and we got bigger." No, we were big. Within 2000 years of agriculture, we had shrunk to four foot 10 inches. Why? Because quite frankly, plants don't like us. They don't want us to eat them, and they don't want us to eat their children, their babies, their seeds.

Plants have a problem when animals arrived, because they couldn't run, they couldn't hide, they couldn't fight, but as you and I know, they're chemists of incredible ability. They can turn sunlight into matter, and I haven't figured out how to do that yet. What they do is they use chemical Orphic, and one of their favorite attack mechanisms is the protein [inaudible]. Lectins are so beautifully, diabolically designed to wreak havoc on an animal predator, I couldn't have done it better myself.

Dave Asprey: Isn't it true that our bodies naturally produce tons of our own lectins? Like all animals are full of lectins.

Steven Gundry: Absolutely true. Lectins, there is a communication system, and lectins are patterns that turn receptors off and on.

Dave Asprey: So we have our own onboard set of lectins, but plants have other lectins?

Steven Gundry: Correct. One of the interesting things is the longer we've been exposed to a plant lectin, the longer we've had to adapt from, not so much our genome, but our bacterial genome, and one of the cool things that I like to talk about is we basically uploaded our early warning defense system to our micro biome. Because the micro biome is capable of rapid alteration in gene expression. The micro biome actually sends text messages to our immune system to tell us how things are going in the outside world.

Whether we're being attacked by proteins that are foreign to them or to us, and that's part of the plant paradox in that, as I talk about, there have been seven deadly disruptors which have really screwed up this communication system, and how we have been previously protected from a lot of lectins. To give you an example, there's lectins in leaves. A lot of them are fairly nasty. We're a tree dwelling ape. We came from tree shrews, so I tell women, if they want to call their husband a rat, they're pretty doggone close. We've been eating leaves for 40 million years. We share 99 percent of our genes with chimps and gorillas, and a gorilla eats 16 pounds of leaves every day. As I left with my carnivore [inaudible] colleagues, a gorilla has more muscle than we'll ever dream of, and all they eat is leaves. Must be something to it.

Dave Asprey: I believe that [inaudible] recommends way too much protein, because it's a terrible fuel source. I've been on high-protein diets like you have in my quest to lose 100 pounds. That said, if we ate only leaves, I've rarely come across a profoundly healthy vegan. Yeah, so there is a comfortable middle ground. [inaudible] moderate high-quality protein, and you should eat the low anti-

nutrients of all sources, including lectins. In your book, “The Plant Paradox”, which by the way, I’ve had a lot of authors on Bulletproof Radio who have noteworthy books, so if you’ve liked the Bulletproof diet, or “Headstrong”, you really ought to read “The Plant Paradox”.

There is some overlap in our recommendations, there are some differences in our recommendations, but if you’re wondering why some foods make you weak, there’s stuff in here that goes way deeper than I ever did in my chapter on lectins. There’s a whole book on lectins, and it’s worth it. Just a quick plug. No, Doctor Gundry didn’t ask me to do that, I only have people on who have cool stuff. If you’re watching on YouTube, go to [Bulletproof.com/YouTube](https://bulletproof.com/YouTube) to find it. That’s what the book looks like, and you can tell it’s all dog-eared, because I went through and I learned some stuff. If you’re saying, “We were meant to be leaves, but some leaves contain lectins.”

I remember my daughter when she was maybe two. We had a little garden in our backyard, and she learned she could go, she could eat Rosemary, and she’s 10, she still goes out and eats herbs from the garden just raw the same way I do. She didn’t know. We had some squash growing, it was a pumpkin thing. She takes a leaf from the pumpkin and eats it, and farts for the rest of the day, and crying with cramps and all this kind of stuff from one leaf because of the lectins in the plant. In my experience, in fact here’s another one, I’m profoundly lectin sensitive. I figured this out a while ago, and if I eat one bite of potato, especially the [inaudible] from your description, but all the greens suck, so if I eat one of those things, I get the upper back pain that I had my entire adult life until I figured this out. It was always along the upper spine, had arthritis in my knees since I was 14.

I would never touch the stuff. My son, who is seven, and they started putting one potato in the soup they make at school, and sure enough, he needs a massage every night in his neck for the entire week from that one thing. My daughter can eat a potato with no effects. At least none that we can see right away. I told her don’t eat potatoes, they’re probably not biologically very good for our family. Why the difference in responsiveness between two of my own offspring? What’s going on there?

Steven Gundry:

That’s a great question, and half of my practice now is autoimmune diseases. The really cool thing is, there’s usually a family history component. When you do, I do family trees, and it’s fascinating that there’s usually IBS, or there was diarrhea, constipation, or lots of hypothyroidism, lots of rheumatoid arthritis. There is clearly a genetic predisposition. We look at all the markers that are known for autoimmune diseases. Clearly, a lot of people carry these. What’s interesting is in my book, there are people who react to these almost instantaneously. I call them canaries. Coal miners used to go into mines and they couldn’t smell the methane gas, so they’d carry canaries with them, and the canaries would flirt around, and they might have a much higher metabolism right.

If the Canary keeled over stopped singing, you ran. There are people like you, and actually people like me, that react virtually instantaneously. That's a huge benefit actually. What's been fascinating to me is, is that I'm now absolutely convinced that every one of us is sensitive to the major one. We may not feel it until 10, 20, 40 years ago when we have bone-on-bone arthritis, or we have three blood vessels that are clogged up, and you go, "Gee, I eat a healthy low-fat diet, and I run 40 miles a week, and that doesn't make any sense." When you start breaking it down at where lectins invite disease, it's just been fascinating to me to watch people who are scheduled for hip replacement, or knee replacement, and we put them on this program, and six months later they've regrown cartilage in their joints and they cancel their operation.

Dave Asprey:

You said something there. I grew up in New Mexico where green chili, which is a member of the nightshade family that's very high in lectins, it's soul food. I love the stuff, I used to slice habaneros and just put them on whatever I was going to eat, and cry when I would eat. I tell you, I put a little bit of cayenne on my food, my joint symptoms return. The symptoms that started when I was 14 and I was diagnosed with arthritis. While my dad, mid-seventies, he's had one hip replacement, and I've been harping on him for a while. You always have to convince your parents. You think at this point he'd listen, and he does to be totally honest. He's very, very into the Bulletproof thing now. At the time he wasn't. I said, "Dad, could you just stop eating cayenne pepper and try this just for two weeks?" He argues against it.

Eventually he says, "I'll give it a try." He calls me in two weeks later, and he says, "You know what? He said, "I don't think I'm going to have to have my other hip replaced." After two weeks of just not eating these things, and he was already avoiding greens, and mostly Bulletproof, but you can't give him green chili, because life isn't worth living without green chili, which is what any Mexican will tell you, but it is. I don't eat my favorite food either, because it's just not worth the pain. You're saying everyone's affected by this. In my case, I feel crappy right away, so it's an obvious thing. What's the normal onset time? Let's say you eat this stuff as a kid, they put cayenne in half the stuff you can get, the healthy kale chips, or whatever. A lot of other lectin contains made from quinoa, and some garbanzos, and all these other random foods that are full of lectins, how long should you expect before you start seeing bad things happen to you that seem to have no cause?

Steven Gundry:

It is amazing. I have a lot of parents who bring younger kids to me with asthma, or eczema. Have a pretty big population of Crohn's, kids. These are the kids, invariably, they had a lot of ear infections, or a lot of sore throats as a little kid, and they got a lot of antibiotics. Well-meaning by their pediatricians, but what I've discovered in 10 years now is that all those runny noses, and your infections, and sore throats were actually caused by our response to lectins. Mucus production is actually our fundamental way of trapping lectins. Lectins are proteins that seek out sugar molecules to bind to, and mucus is mucopolysaccharidoses. That's multiple sugars. We throw down this defensive shield to trap lectins.

If anybody eats spicy food, they'll notice that their nose starts running. It's even got a medical term called [inaudible] rhinorrhea. The hilarious thing is that it's actually us trying to protect ourselves from lectins. It's really cool when these kids with eczema, or asthma, or tonsils. When we take lectins away from them, it's difficult because our culture is just lectin centric. Then they clear up so fast, and then the kids actually notice, if they reintroduce one of these little troublemakers, like one kid, couple of grape tomatoes flared his asthma. One kid had a couple bites of pizza at a party, and his eczema just blossomed. Then they know, they become so sensitive that it's no fun to eat these foods anymore.

Dave Asprey: Most definitely. My kids feel the difference from the stuff they're sensitive to, and they haven't been exposed that much. Can you explain Greece? I went to Greece recently, and there was almost nothing. I'll have the fish, and they won't put anything on it, because every single vegetable available in Greece is an eggplant, a tomato, a potato, or a pepper. Those are all super high lectin, nightshade family foods, and may be a grape or something if you're lucky. Why is everyone in Greece not just falling dead from heart disease early on? In fact, the Mediterranean diet is from there.

Steven Gundry: Yeah. The funny thing is that the pleasures of that Mediterranean diet, eggplant, and peppers, and cucumbers, and potatoes, and tomatoes were all brought by Columbus. None of these people actually ate any of these foods until 500 years ago. In fact, the Italians were so afraid of tomatoes that they didn't eat them for 200 years. Then they decided that the peel and the seeds actually had the major lectins, and so any Italian will tell you, you cannot make tomato sauce without peeling and de-seeding a tomato. In fact, interestingly enough, I studied cultures, what they do to avoid lectins.

The Roma tomato was hybridized to have the most pulp to skin and seed ratio. You just throw a Roma tomato and boiling water for 30 seconds, pull the skin off, cut it in half, squeeze the seeds out and into a pot [inaudible 00:30:53]. It's amazing how cultures have adapted to this. My grandmother on my mother's side was French, and she taught my mother that you could not serve a tomato safely without peeling it and de-seeding it. All my life I ate field and de-seeded sliced tomatoes, and it wasn't until actually one of my first days at Yale that I was served a tomato with peels and seeds, and I thought it was the weirdest thing I'd ever seen in my life, who would eat something like that?

Dave Asprey: Go ahead.

Steven Gundry: Getting back to Greece. Interestingly enough, the arthritis straight in Italy, and Greece, and Sardinia is incredibly high. Yeah. And it was one of the things the Sardinian's actually have one of the longest lifespans of any. They actually have one of the highest autoimmune disease rates in all of Europe. I'm convinced that it's actually these healthy foods that have been blocked by the other healthy foods. They drink a ton of olive oil. A leader of olive oil week is considered a great idea. I actually like that idea. They drink a lot of polyphenols

in wine. The Greeks eat huge amounts of various plants. Purslane is an amazing plant in and of itself. It turns out that we used to think purslane was a heart healthy plant, because it has a lot of omega-3 fats. It turns out modern research shows that purslane is so good for you, because it has huge amounts of prebiotic's inulin which feeds friendly bacteria. Our first guess about purslane was wrong about the omega-3 fats. It was actually that it was incredibly high in micro biome friendly fiber.

Dave Asprey: The micro biome friendly fiber effectively increases short-chain fats. Not the omega-3's, because when you've got bacteria digested, it makes the short-chain. You've got the short ones, you've got the medium ones, you got the long ones, and they can all be saturated, which is kind of weird.

Steven Gundry: Yep. The nice thing about your MCT Oil is that it's a medium chain saturated fat that does not have to travel on chylomicrons to be absorbed, and I spend a lot of time in the plant paradox showing people that MCT Oil is incredibly useful. Because these little particles of bacteria, which are called like polysaccharides, LPS's, I don't swear, but in the book I can't resist calling them little pieces of shit, because that's actually what they are. These pieces of bacteria ride on chylomicrons through our gut wall. I'm convinced that they're a major problem in everyone's health.

Dave Asprey: Now, there are two kinds of chylomicrons with different molecular weight. Do OPS's ride on both of them?

Steven Gundry: Yeah, they can ride on all of them. The really cool thing about MCT is that it does not need a chylomicron to be absorbed through the intestinal wall. It's quite unique.

Dave Asprey: It is, and in several different studies, it's also protective against LPS toxicity in the rest of the body. Even if another fat, like a saturated fat, say butter, was to carry something through in the presence of an MCT, the MCT has a protective effect. That's one of the reasons that I put those together in Bulletproof coffee, was because if you have a high fat diet without enough vegetables, without may be activated charcoal to bind LPS, you will contribute to inflammation. Saturated fats that are damaged, or with an unhealthy micro biome might not be a good idea. Right?

Steven Gundry: Right.

Dave Asprey: Now, you mentioned something about kids in strep throat and antibiotics, that describes me to a T. I was obese as a teenager, I was on antibiotics for more than 15 years every month, chronic strep throat. But I lived in a basement that had toxic black mold in the walls, which also triggers autoimmunity. In fact, the big categories of suspect foods in the bulletproof diet are high micro toxic foods, high lectin foods, high oxalic acid foods. Which tend to, actually oxalic acid is also triggered by fungal infections, like Candida in the body, and triggers gout.

Additional uric acid, and things like that. I'm saying look, these affect different people differently, but they're not good for any of us. What interactions between the autoimmunity, or just between the lectins and these other poisons made by fungus, and some cases, bacteria and water damage buildings, what have you seen in your practice?

Steven Gundry: Great question. There is a wonderful woman, I didn't put her in the book, because she's actually a very private individual. She came to me, she was from San Diego, and had bought a house that was newly constructed, but she didn't know that it was constructed during a lot of wet weather in Southern California. She had a ton of toxic black mold in her house, and she moved out, and you would know her name, because she became a bit of a world expert on toxic mold.

Dave Asprey: She's probably been in my documentary then, because I did ... Maybe not.

Steven Gundry: She moved out to the desert, and she literally could not go anywhere. She couldn't go to doctor's offices, she'd sense it. She came to me, she says, "I hear you're different." I said, "I'll tell you what, I think the fundamental problem is lectins are sensitizing you, your immune system, to fire at any foreign substance, and to kick ass, and take names, and we'll figure out who everybody is later." I said, "Humor me, take lectins out of your diet, and let's see what happens." Sure enough, within two months, she was back. All of her immune system activations that I measured was down to normal, and she says, "Oh, you're a genius, it was the lectins." I said, "Well, no, no, no, the molds were getting you, but I took away the other primary signal so your immune system calmed down."

Dave Asprey: It's death by a thousand cuts. It's overall inflammatory load on the body, and the whole approach for the whole bulletproof lifestyle, it, for me, is like how do you lower inflammation? There is cryotherapy, and cold showers, specific exercise, breathing, meditation, those are all just ways of chiseling away information. Taking lectins out is a huge, that's like a bulldozer. I would just say, there's a lot of people who have been exposed to toxic mold, or who have chronic Lyme, which is always toxic mold exposure mediated if your Lyme doesn't go away with normal treatment, you have toxic mold that broke your immune system. I know that's controversial, but anyway, that's 15 years working on that.

Steven Gundry: There's a lot of us who see chronic Lyme, and I think a lot of us agree that it's really no longer the Lyme per se that's the problem, but it's this ongoing chronic inflammation. What my job as a detective is to say, "Okay, you've been through god knows how many antibiotic treatments, and you still have all these markers for inflammation. You feel like crap, and you got all over the world, and there's some wonderful people doing this." I said, "Let's add this piece of taking lectins away from you, because I can tell you that lectins are really good at potentiating inflammation." I get a lot of people with Lyme that haven't gone down the throat, and knock on wood, nobody's got 100 percent track record. If somebody

says they got 100 percent track record, don't believe them. A lot of times this works just great.

Dave Asprey:

There's a prominent person in the health field who advocates high legume high bean kind of a diet. Came down with chronic Lyme, and we had some private conversations, like, "You need to get some brain octane. You need to do cyclical ketogenic." Lo and behold, magically, things did resolve. I've seen this over and over where it's one thing in the diet that's holding you back, so then you can't handle other things. Growing systemic resilience is actually a core part of my antiaging strategy where I want to turn off inflammation, I want to monitor my inflammation markers, and then I want to keep doing everything possible to be able to just stay on top of that so that the body can repair itself. I'm working on a method of stack ranking. How do I know which lectins matter most for me? You're saying cucumbers, but most people tolerate cucumbers pretty darn well.

The overall scheme of lectin containing foods, I put them at the bottom of the list, or white rice is another one. We're like, "You know, we polished the brown stuff off for a reason, so most people tolerate those." Yeah, it could be brown eggs, if you tolerate eggs, they're a superfood. If you're allergic to eggs, stay the hell away, because they're full of lectins. Stuff like that. How are some of us listening to the show going to know, do I just avoid every food with every lectin, and pretty much I eat the most boring, restrictive diet. I go to restaurants and I'm just like Dave, and I tell them, "Just put salt on my food already. I don't want your other crap." How far down do you have to go on this list? Do you have it stack rank, or is there a genetic test? How do we know?

Steven Gundry:

Well, yeah. Yeah, one of the things I published years ago at the American Heart Association is, there is a hormone called adiponectin. Adiponectin is actually supposed to be a darling of weight loss and health. I started noticing that my patients with autoimmune diseases had elevated adiponectin's. I said, "Gee, that's interesting, this is supposed to be good for you." Then I started looking at the literature, and it turns out that people with rheumatoid arthritis have elevated adiponectin's. Then there's a beautiful study from the New England health study showing that skinny women with elevated adiponectin levels have a very high incidence of dementia. That doesn't make any sense.

I started looking at another inflammatory cytokine called TNF alpha. I showed that if people had an adiponectin level from a particular lab called [inaudible], which is in the Bay Area, above 16 that they were sensitive to major lectins. That usually their TNF alpha was elevated. I showed in 800 people that if you took the major lectins away from them, that their TNF alpha would fall to normal. Their adiponectin would remain elevated. I proposed, and I still use it to this day, that an elevated adiponectin level is marker for lectin tolerance.

Dave Asprey:

Wow.

Steven Gundry:

Yeah. Now, the only people who that won't show up on are obese people. Obesity will absolutely depress adiponectin, but the fascinating thing is, when I

take obese people and put them on my lectin limited diet, that as they lose weight their adiponectin heads up into the abnormal range, and I go, "I knew it, I knew you were lectin sensitive. Here you are." I think that's a really good way to start. It's a cheap test, anybody can draw it on anybody. I think if you're 16 or above, you ought to pay attention. How's that to start?

Dave Asprey: That's helpful. You know if you've got a problem, and how do you know if you have a problem with cucumbers versus bell peppers? Is there a way to differentiate?

Steven Gundry: Great question. What I'll do, and I talk about this in the book, let's clean up your act. You can hate me for a few weeks.

Dave Asprey: Amen.

Steven Gundry: Then, let's start reintroducing a class of foods. Let's use small cucumbers, let's use small zucchinis, immature, let's peel the skins, give it a try for a couple weeks. Now, in my office, when we reintroduce foods, we'll draw inflammatory markers on them. If the inflammatory markers go up, they may not even have felt it because it's so subtle, but we'll go ... There's a great story in the book about a woman who had rheumatoid arthritis her entire life. We got her off of lectins, we got her off all of her immuno suppressants. These things are long-term deadly as anyone in the transplant field knows. Just ask Len Fry how he felt about immuno suppressants. She got off everything, and she was thriving for several years.

I eventually see her back every six months. I'm looking at her labs, and she's got this TNF alpha that's up for the first time in two years. I said, "You're cheating." She said, "Me, are you crazy? I feel so great. I'm off of drugs, my hands work. Why would I cheat?" I said, "I'm telling you, there's something in your diet." We started going down the no food list, and we get down to American nuts.

Peanuts and cashews are American beans, they're not nuts at all. So are sunflower seeds, pumpkin seeds, and Chia seeds. She gets down to cashews, she said, "Oh my gosh, I've been on a cashew kick, I forgot all about cashews. In fact, I've got a bag of cashews in the car right now that I was eating on the way here." I said, "That's it." I said, "Okay, come back in two weeks, throw away the cashews." Sure enough, her marker went right down.

Dave Asprey: It's interesting. I totally recognize that some people are going to react to cashews, so I use cashews in the Bulletproof collagen protein bars, because you basically need a binding agent, and I looked at immune reactivity to nuts. Cashews are one of the lowest nuts. Macadamias are too oily, you can't use them for that purpose, otherwise I would have-

Steven Gundry: Yeah, they're the best.

Dave Asprey: Yeah, you could put a couple of them in something, but they drip oil. I have the highest fat load of any bar out there by design, which is awesome. Lots of brain octane, which is also liquid oil. It was a tough call, because I'm like, "I'd rather use no nuts so everyone's happy, but almonds, how are almonds from a lectin perspective versus cashews?"

Steven Gundry: They're pretty nasty.

Dave Asprey: Yeah.

Steven Gundry: It's actually the peel of the almond that has the problem, and actually, cashews, it's the outside peel that has the vast majority of the toxins.

Dave Asprey: They're steamed. The reason I chose them is that you have to basically cook off the outer layer of the cashew, and you're just getting the inner thing. It's just like polished rice. It was the lowest toxin thing I could come up with, versus I could use sodium [inaudible], or milk protein isolated, which are just crap proteins that companies just throw in these low-carb bars, and they do it because it's cheap. Those are also inflammatory to the other pathways. It's hard. I agree, if someone's really tough on lectins, cashews might not be right for you, but man, they're probably one of the better nuts, or ... Do you agree with that? Or no. It's okay to disagree.

Steven Gundry: The really sensitive folk, the guys with autoimmune diseases, I can't tell you the number of folks that peanuts and cashews are real problematic. I can tell you, personally, that sunflower seeds will throw my immune system out of whack. In the doctor's dining room at our hospital, I usually munch on walnuts when I'm walking by, and they ran out of walnuts. They had this big container of sunflower seeds. This was actually last year. I said, "Oh, what the heck, I haven't had sunflower seeds in years, I need something crunchy."

I started eating about a quarter cup of sunflower seeds. I run my dogs about two and a half miles every morning. jog. I got plant [inaudible] and tendinitis in my left foot, which I never had in my life, and I'm going, "Where the heck did that come from?" I didn't trip, I didn't do anything, I didn't change shoes. Then a light bulb went off and I said, "Son of a gun, it's the sunflower seeds." I stopped them, and the plant [inaudible] resolved within three days.

Dave Asprey: You are one of the top event correlation doctors as far as I can tell from your thought process, you were saying you draw lab panels for information. You don't have to draw a lab panel, all you have to do is wake up in the morning and make a fist. If you have a harder time making a fist, your grip strength is low, or you have a pain in your feet that you didn't have before, it's a pretty sure sign that you were exposed to something. It's usually a lectin. It was moldy food, might have been histamine containing food, it might have been oxalic acid containing food. It's usually one of those, and it might be something else. It's usually one of those.

Or you drank some beer which has [inaudible] A or something. Those are primary things, but if you have no inflammation, you wake up in your muscles all work will come your grip strength is strong, there's a pretty good correlation with no inflammatory markers. At least in my experience. You have a little bit more clinical experience than I do given that I'm an unlicensed bio hacker. Do you buy that [inaudible]?

Steven Gundry: Yeah, I do. The basic thing is, what I want to do, because I'm a researcher, is I wanted to prove this with biomarkers. I want to just say, "Hey, Doctor Gundry, I went on your diet, and I feel great." It would be the placebo effect. I wanted it to correlate the fact that they felt great, and that we were throwing away their blood pressure meds and the diabetes med with the actual markers. Funny thing is, I publish all my stuff in academic places, like the American heart Association, like the European Atherosclerosis Society. I don't go to the touchy-feely places to show my data. Because I want people to realize this is science back. It's not conjecture. That's what I hope I bring to the table.

Dave Asprey: Well, you have the great scientific background, the real medical background. Correlating this stuff to inflammatory markers is really important. Also understanding pathways. Let's go to pathways for a little while. My perspective, as a computer hacker by training, and a bio hacker now, is I always look for, how do I manipulate and modify the system. We assume we know how the system works, but there might be missing pieces. Let's okay, you can still hack something without knowing everything about it.

One of the things that I publish in Headstrong was a bunch of different pieces of data about how lectins inhibit mitochondrial function. Your mitochondria are the power plants in your cells, you know this, I'm just saying that for listeners, that power plants or batteries in your cells, and certain lectins, and I'm guessing it's different lectins for different people based on your mitochondrial DNA, that they literally inhibit this. When your lectins hit your mitochondria, it changes your leptin, not lectin, L-E-P-T-I-N. Leptin resistance proceeds insulin resistance, proceeds type II diabetes, and it's a sign that your body isn't making energy the way it should.

You don't make enough energy, you're going to get brain fog, then you won't be headstrong. That's why the book is called that. Are we looking at correlations between mitochondrial DNA? This is the power plant wiring of the body, and specific lectin sensitivity? Or are we looking at nuclear DNA, which is like the physical hardware, the walls and the foundation, the meat of your body? Do we know?

Steven Gundry: No. I'm actually even more interested in bacterial DNA. Because as you know, we get all of our mitochondria from our mother. All mitochondria are female.

Dave Asprey: In the bacteria by origin, right?

Steven Gundry: That's exactly right. They are all bacteria by origin. Cells involved them millions of years ago, billions of years ago. There is a really cool theory, which I ascribe to, that we get all of our initial bacterial load from our mother. She craps on us.

Dave Asprey: Never stops in some cases.

Steven Gundry: That's right. If you're lucky. There's a theory that the president of the microbiologist society has that we get our female bacteria to talk to our female mitochondria, and they actually text message each other. That one of the problems with early antibiotics that probably screws this whole thing up is that our original female to female connection, and no offense to guys, our mitochondria are female. Is that that early connection, the wires get cut. When a new population of bacteria move-in, then they don't have the intimate connection to talk to mitochondria. What I think, yes, lectins can target mitochondria, there's no question about that, but I want to get them closer to the source where I can manipulate them. That's in our micro biome. What I want to do is I want to reestablish those connections between the micro biome, a healthy micro biome, and not only our immune system, but mitochondria. That's where I like to do my hacking.

Dave Asprey: The text messages, the signals between the gut bacteria and the mitochondria, what's your theory for how that message is sent?

Steven Gundry: There's a famous quote, and forgive me, because I forgot the artist's name, is that reality is a scanning pattern.

Dave Asprey: I like that quote, but I don't know who it's from.

Steven Gundry: I'll send you a picture of it. Yeah. I got interested in pattern matching very early on, because of immunology. You got interested in pattern matching, because that's how you could hack a computer. We're just looking at patterns. All communication happens at either the cellular membrane, or the mitochondrial membrane, or the nuclear membrane. This is where information is exchanged. We are so stupid, we don't realize that you can take a nucleus out of a cell, and that cell can do just fine, and get tons of information, and respond to outside information without having a control center. We've got it all backwards.

The cellular membrane is where all the hacks or all the communication goes on. That's how it happens. These bacteria produce hormone like substances that enter either our lymphatic circulation, or enter our blood, and they then attach to membranes, either the cell membrane, or they're quite capable of passing through the locks in a cell membrane, and attach to a mitochondrial membrane. They exchange information. As you know, we're now just scraping the surface on this, but that's where all of us are trying to figure out how to keep these little swallowed bacteria happy.

Dave Asprey: There's definitely the chemical and hormonal communication that happens. One of the things that came to light so to speak when I was doing the research for headstrong is the effect of bio photons, were your gut bacteria make 5000 more photons than your mitochondria make, and your mitochondria will listen to these, and send from these things. That's one of the reasons why I'm all oversleeping in a dark room. Pitch black room, because it actually allows your mitochondria to hear your gut bacteria better. Because if there's a little blue or green, or there's other LEDs out there, it actually changes this weird communication that would be invisible to you. It's just almost too bizarre. I don't know, I do that, and it works.

Steven Gundry: I agree with you. Totally agree with you. Blacked out room is so important, because photons can go actually right through the retina.

Dave Asprey: In fact, I'm going to have to talk about these things. I did some research on mitochondria in the eyes, and I don't know if there's a lectin connection here, but I'm asking you. It turns out that five percent of the retinal cells are [inaudible] sensors. They have extra mitochondria, but they take light, and they don't set it into your visual processing at all. They send it into the SCN in the brain which controls your daylight cycle. We made these, I say we, I'm a backer of the company who did this, the glasses are called True Dark. These glasses that block every spectrum of light that's documented to affect [inaudible]. You're basically tricking the mitochondria in your eyes into believing it's absolutely pitch black, and I doubled my deep sleep if I wear these for an hour or two before bed, and I don't get jetlag at all if I use these on long flights.

Steven Gundry: How do I get one?

Dave Asprey: Wow, it's almost like we arrange this ahead of time, except we didn't, but you can tell, because I'm unwrapping them on the video. These are on the bio hacks website. The reason I'm asking here is we're getting into these bio signaling things. What do lectins do for bio photons, what do lectins do for sleep? What do they do for vision? Take me down that road.

Steven Gundry: Okay, so one of the guys I talk about in the book whose name is Tony, Tony had alopecia and he had huge white spots on his hand in his arms, and some on his face. Michael Jackson had alopecia.

Dave Asprey: [inaudible], or alopecia, or both?

Steven Gundry: [inaudible], sorry, sorry.

Dave Asprey: Okay.

Steven Gundry: We're seeing a bit [inaudible] earlier today. Yeah, [inaudible]. Loss of pigment. When he went on my program years ago, his vitiligo disappeared. All of his cells grew back, and he said, "So, how did that happen?" Now, I could have been a

wise guy and said, "Well, my diet is very anti-inflammatory and so that's how it happened." I went nah, nah, nah that's too easy. I looked into melanocytes, and melanocytes are modified neural cells. Now, the original predator of plants were insects. Lectins were designed to paralyze insects by stopping the communication between nerves. Makes great sense.

I said, "Wait a minute, these are modified nerve cells, and Lectin's target our nerve cells, so it was the lectins that were doing this." Fascinatingly, I lost touch with him, and he saw me at a conference about four years ago, and his vitiligo was back. I said, "Hey, what's the deal?" He says, "Ah, you know, I'm eating sloppy." I said, "Let's do this experiment. Let me give you the two pages list again. Come back on it, and let's see what happens." We were just on a panel at Harvard three weeks ago, on a wellness symposium, and he was sitting right next to me, and he held up his hands and they were clear and he says, "I've got to tell you, I'm living proof that lectins target melanocytes."

I've been fascinated that lectins have potential to target the melanocyte receptors in our eyes, and screw up our deep sleep cycle.

Dave Asprey:

It goes deeper than that, and this is profound stuff for me, you will notice I have a relatively dark tan, that's by design. Inside the eyes we have the rental melanin that is deep inside the eye that isn't protecting it from sun, and in [inaudible] I read about some researchers in Mexico who for like 10 years, and 6000 patients were trying to figure out why is there so much oxygen in the eye, more oxygen than the blood flow can account for. It seems to violate laws of physics. What they figure it out was that melanin in the eye, or neural melanin has the ability to break water down into free electrons and free oxygen in the presence of infrared light, which is what your mitochondria made.

It turns out this is acting as an extra oxygen source, and as an electrical capacitor when you need extra energy, and the eyes need the most energy, and the brain needs the most energy. If you are eating lectins, and they are damaging your ability to make melanin, you're screwed. What is melanin made off? Melanin is made of branched interconnected polyphenols, which is why you and I keep talking about take your polyphenols, drink your coffee, drink your tea, your chocolate. I'm not a fan of red wine because of the mycotoxins in the glycoside and just the relatively low polyphenol count, but okay fine, have some red wine, just-

Steven Gundry:

Drink it from Europe.

Dave Asprey:

Yeah, drink it from Europe, take your glutathione while you're at it. As a matter of fact, bulletproof.com/wine, I have a source for mycotoxin tested wines where they ship it to you, which is kind of cool. I've had some good luck with that as well, but yeah, you've got to be careful on that stuff. Okay, so I just got off track there, I was talking about all these polyphenols and [inaudible]. My theory now that we're just forming in our conversation here, which is fascinating, I love getting a chance to talk with smart guys like you, is that potentially some of the

brain fog ... In fact, you write about brain fog in your book too. It could be caused by the fact that these compounds that plants made to kill insects are harming our ability to have robust energy production in the brain and the eyes.

Steven Gundry: Yep, yeah.

Dave Asprey: Do you see changes in visual contrast sensitivity from people who eat lectins?

Steven Gundry: Very interesting, years ago my wife and I decided to do a completely raw food diet.

Dave Asprey: I did too, ruined me.

Steven Gundry: The interesting thing, we ate mostly leaves and olive oil, we actually had some raw prosciutto. We weren't vegan raw food. Which is really dumb. One of the things that was reported in the raw food is literature was that color intensity got much more intense. In that hearing actually got more intense. I've got to tell you, the placebo effect may be one thing, but I didn't tell my wife this. Both of us, oh I don't know, a month into it said, "You know, it's really weird visual colors they pop." We had a tree that was full of bees every year, and about a month into this, I would be outside and it was like the roar from the bees was almost deafening. I'm going, "What the heck? Are they all around me?" No, they were in a tree away.

I really do think that lectins, and other words, we removed all the grains from our diet, all the beans from our diet. I think there is something to all this.

Dave Asprey: There is a lot of science to be done here, and the Plant Paradox, your new book, is definitely putting it out there in the public sphere in a way that I honestly didn't think that this would reach public awareness this fast. I've been on the mycotoxin text, that's why I did a documentary on it, because environmental mold, not just food mold, but the stuff you are breathing and all is such a huge inflammatory trigger for so many people. Lectins are at least as important, they are just even harder to explain. I'm grateful that you wrote a book that explains it well, and I'm grateful that you have such great experience and such good credentials that it's very hard for someone to say you don't know what you're talking about. They sound like loons if they say that.

It's okay to say you're wrong, or there is a mistake, but directionally, your book is absolutely like something that is important, and I think will just make its way into the national consciousness. Where, is it possible that that salad they are serving you is just completely jacking you up because they put all sorts of weird stuff on it? Weird from an evolutionary biology perspective, but not weird by what your mom ate?

Steven Gundry: Yeah.

Dave Asprey: Talk about fertility in lectins.

Steven Gundry: Well, as you know there is a huge increase in infertility, and men's sperm counts are plummeting. Men's testosterone levels are plummeting. Fortunately, I think a lot of these are some of the seven deadly disruptors that we talked about. [inaudible] is right up there on anybody's list. It's interesting, and I even talk about this in the book, from a plant standpoint, the less of their predators that are alive, or that reproduce is a very good thing. From a plant standpoint, having compounds that interfere with reproduction of your predator would be really high on your priorities. People say, "Well, wait a minute. You say that plants think?"

Well, plants definitely think, not in the way we think of thinking, but they are sentient beings. Even if they weren't, evolutionary pressures affect plants equal to animals.

Dave Asprey: Can I just plug to support what you're saying there. You have to read The Secret Life of Trees. Anyone listening who thinks plants aren't sentient, just read that book, they change their toxins based on predation really quickly. What you are saying there is incredible and proven, so all the skeptics who just didn't listen to that, now listen to what he says. Keep going, anyway.

Steven Gundry: Yeah. I'll give another plug. One of the books that really started me down this path was Michael Pollan's first book. "The Botany of Desire". About how plants manipulate animals to do their bidding. The secret life of trees is the same way, these guys not only think, but the evolutionary pressures are that if you come up with a compound or compounds that either make you less edible, but more importantly make your predator either leave, or die, or not reproduce then that compound will be selected. They've had 400 million years to do this. We've been around 2 million, maybe. Boy, practice makes perfect. The more we realize that this has been an ongoing battle from the day the first insect crawled onto land and said, "Man, this is the garden of Eden, look at everything there is to eat."

The war started right then. People have to realize that it is an ongoing battle, and they are really clever.

Dave Asprey: They are really clever. They go to inhibit fertility for that reason.

Steven Gundry: Yeah, exactly. The problem is we over the last 10,000 years, we've evolved to eat an incredibly lectin rich diet of things we weren't even designed to eat. 75% of all the carbon atoms in the average American come from corn. 5% of the carbon atoms in an European come from corn. Nobody ate corn until 500 years ago. It's just such a foreign compound.

Dave Asprey: It's a high lectin and a high mycotoxin food.

Steven Gundry: Oh yeah, huge mycotoxins in corn.

Dave Asprey: Yeah. All right, I've got a hard question for you. If you had to eat a plate of French fries made with potatoes fried in canola oil from a restaurant, or smoke a cigarette, which would you do?

Steven Gundry: You know, I have to go back to my friendly neighborhood the [inaudible], or [inaudible]. They smoke like fiends. They eat taro root, and actually taro root makes great French fries. They live into their mid-90s, and there has never been a case of heart disease, and there has never been a case of lung cancer, and there has never been a stroke. I actually tell my smokers that the other things are actually going to kill them faster, and if I have to have them have advice, and give up the things I want them to give up, I'm going to fill them so full of vitamin C every day, and so much glutathione every day. I'll trade them their cigarettes at least temporarily. I would choose to have neither, but I've actually never had a cigarette in my life.

Dave Asprey: Me neither, I don't smoke.

Steven Gundry: I don't intend to take you up on that bet.

Dave Asprey: Sounds like your answer is you would say the lower harm is the cigarette?

Steven Gundry: Right, yeah.

Dave Asprey: I'm in agreement with that, [inaudible], and we did that. Okay, you are a former president of the American Heart Association, right? We all know, smoking is a crappy habit, right? It's just that fried high lectin foods fried in bad oils are even worse. Yet, we have so many people, "Oh, I would never smoke a cigarette." They are munching on death in a little wax paper wrapper, and so I'm like, "Don't do either one either." Who knows, nicotine actually has health benefits.

Steven Gundry: Oh yeah, I mean nicotine is fantastic for you. I mean, it's great for your brain. [inaudible]. It's just currently with a bad delivery device.

Dave Asprey: I supplement with a micro does nicotine spray, the lowest toxin containing when I can find. Has a little bit of artificial sweetener I don't like, but it's the least harmful one and I will deal with that simply because it is a cognitive enhancer associated with all sorts of good stuff. I'm not going to light it on fire before I take it. All right Dr. Gundry, I could talk to you for hours, and this has been such a fun interview, and thank you for writing the Plant Paradox. I've got a final question for you. If someone came to you tomorrow and said, "Based on everything you know in your life, not just your life's work here, but everything. What would you tell me if I told you I want to perform better in everything I do as a human being?" The three most important things, what are they?

Steven Gundry: Number one, obviously get lectins out of your life. Number two, practice intermittent fasting. The longer you go between meals the better. The farther away you go between your last meal and the time to go to bed, the better. Number three, absolutely stay away from blue light. Those are my top three's, but believe it or not probably the one in the middle is the one that most people can do on a moment's notice, but most people don't.

Dave Asprey: The one in the middle being?

Steven Gundry: Intermittent fasting.

Dave Asprey: Intermittent fasting.

Steven Gundry: It's interesting, my first book came out nine years ago, and I had a whole chapter on intermittent fasting. Even back then, from January through June, I only ate one meal a day. I didn't eat breakfast, I did eat lunch, and I ate all my calories between six and 8 o'clock at night, so 22 that out of 24 hours I was fasting. Believe it or not for the last nine years I've continue to do that, in fact June 1 was when I finally broke fast. I break fast June 1. I actually had lunch today for the first time in six months. My editor thought I was such out there crazy that we cut it down to about a page. I said, "No, no, no this is so important." She says, "No, you're really kooky anyhow, but this is way out there." Now of course, every time a new book comes out on a diet I just kind of chuckle when I look to my original manuscript.

Dave Asprey: It is true that fasting is a low lectin diet.

Steven Gundry: Yeah, exactly.

Dave Asprey: By the way, it is almost 3 in the afternoon where I am recording today. I haven't had anything to eat today yet. Just my coffee.

Steven Gundry: [inaudible]. Yep.

Dave Asprey: Awesome. It is indeed, although I'm starting to get ready for some good delicious dinner. Without any lectins in it, you can count on it. All right Dr. Gundry, where can people find out more about your work other than picking up your book online, or whatever books were sold called the Plant Paradox?

Steven Gundry: They can go to gundrymd.com, they can sign up for a free newsletter. I post tons of recipes on my YouTube channel, and I post tons of blogs. Best place to start is gundrymd.com.

Dave Asprey: Awesome, well thanks again for being on Bulletproof Radio.

Steven Gundry: Hey, great to chat with you. Big fan, and hope to chat again.

Dave Asprey:

Count on it. If you liked today's episode you know what to do, go ahead and pick up a copy of the Plant Paradox. Read it, and see if there is something you can do in your diet to make you perform better, make you feel better. Because here's a little secret, when you have less inflammation, when you have fewer lectins, when you have fewer anything else that pisses your body off, you have more energy. When you have more energy, you are a nicer person, when you are a nicer person everyone around you likes their lives better too. It is really a good investment, so pick up a copy of the plant Paradox. While you are at it, if you haven't read Headstrong, these books are very compatible, you learn things from both of them. Since Dr. Gundry and I have both spent thousands of hours writing these books, if you can spend 20 seconds reviewing them on Amazon, we will know, and we are thanking you in advance.